

U.S. DEPARTMENT OF COMMERCE, PATENT AND TRADEMARK OFFICE		DATE: March 29, 2006
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		U.S. APPL. NO. (if known) 10573888
INTERNATIONAL APPLICATION NO.: PCT/JP2005/001460	INTERNATIONAL FILING DATE: February 2, 2005	PRIORITY DATE CLAIMED: February 27, 2004
TITLE OF INVENTION: OPTICAL FUNCTIONAL WAVEGUIDE, OPTICAL MODULATOR, ARRAYED WAVEGUIDE GRATING, AND DISPERSION COMPENSATION CIRCUIT		
APPLICANT(S) FOR DO/EO/US: Hiroyuki TSUDA		

Applicant hereby submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

- ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
- ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
- ☒ This is an express request to begin national examination procedures (35 USC 371(f)) at any time rather than delay examination until the expiration of the time limit set in 35 USC 371(b) and PCT Articles 22 and 39(1).
- ☐ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
- ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2)):
 - ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
 - ☐ has been transmitted by the International Bureau.
 - ☐ is not required, as the application was filed in the United States Receiving Office (RO/US)
- ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
- ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - ☐ have been transmitted by the International Bureau.
 - ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - ☒ have not been made and will not be made.
- ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
- ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
- ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

ITEMS 11. TO 16. BELOW CONCERN OTHER DOCUMENT(S) OR INFORMATION INCLUDED:

- ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
- ☐ a. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
☒ b. ASSIGNEE(s) NAME(s) AND ADDRESS KEIO UNIVERSITY, Tokyo, Japan
Please publish the assignee data with the application.
- ☒ A **FIRST** preliminary amendment.
☐ A **SECOND** or **SUBSEQUENT** preliminary amendment
- ☐ A substitute specification.
- ☐ A change of power of attorney and/or address letter.
- ☒ Other items or information: 15 sheets of drawings


U.S. APPLICATION NO. (if known) 10/573888		INTERNATIONAL APPLICATION NO. PCT/JP2005/001460		DATE: March 29, 2006	
---	--	---	--	--------------------------------	--

17. <u>X</u> The following fees are submitted:				<u>CALCULATIONS</u>	<u>PTO USE ONLY</u>
Basic National Fee (37 CFR 1.492(a)(1)-(5)):				\$300.00	
Search Fee - all other situations				\$500.00	
National Stage Search Fee - U.S. was the ISA				\$100.00	
National Stage Search Fee - search report prepared and provided to USPTO.				\$400.00	
Examination Fee - all other situations				\$200.00	
National Stage Examination Fee - U.S. was IPEA and, all claims satisfy PCT Article 33(1)-(4).				\$100.00	
ENTER APPROPRIATE BASIC FEE AMOUNT =				\$1000.00	

Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). the fee is \$250.00 for each additional 50 sheets of paper or fraction thereof.			
Total Sheets	Extra sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	RATE
44 - 100 =	/ 50 =		x \$250.00

Surcharge of \$130.00 for furnishing the oath or declaration later than <u> </u> 20 XX 30 months from the earliest claimed priority date (37 CFR 1.492(e)).		\$ 130.00	
--	--	------------------	--

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
TOTAL	9 - 20 =		X \$ 50.00		
INDEPENDENT	1 - 3 =		X \$ 200.00		
Multiple dependent claims(s) (if applicable)			+ \$360.00		
TOTAL OF ABOVE CALCULATIONS =				\$1130.00	
Reduction by 1/2 for filing by small entity, if applicable. (Note 37 CFR 1.9, 1.27, 1.28)					
SUBTOTAL =				\$1130.00	
Processing fee of \$130.00 for furnishing the English translation later than <u> </u> 20 <u> </u> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				+	
TOTAL NATIONAL FEE =				\$1130.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +					
TOTAL FEES ENCLOSED =				\$1130.00	
				Amount to be:	
				refunded	\$
				charged	\$

U.S. APPLICATION NO. (if known) 11-777000	INTERNATIONAL APPLICATION NO. PCT/JP2005/001460	DATE: March 29, 2006
<p>a. <input checked="" type="checkbox"/> A check in the amount of \$ 1130.00 to cover the above fees is enclosed. (This paper is filed in triplicate)</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. 01-2340 in the amount of \$ <input type="text"/> to cover the above fees. (A duplicate copy of this sheet is enclosed.)</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 01-2340.</p> <p>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed to request that the application be restored to pending status.</p>		
<p>Send All Correspondence To:</p> <p>Armstrong, Kratz, Quintos, Hanson & Brooks, LLP Suite 1000, 1725 K Street, N.W. Washington, D. C. 20006 Tel: (202) 659-2930 Fax: (202) 887-0357</p>		 23850 PATENT TRADEMARK OFFICE
Typed or Printed Name James E. Armstrong, IV		Reg. No. 42,266
Signature <i>James E. Armstrong</i>		Date: March 29, 2006

JAM/aoa